

## WRITE DRIVER FOR A MAGNETORESISTIVE MEMORY

### ABSTRACT

A write driver uses a reference current that is reflected to a driver  
5 circuit by a voltage. The driver circuit is sized in relation to the device that  
provides the voltage so that the current through the driver is a predetermined  
multiple of the reference current. This voltage is coupled to the driver circuit  
through a switch. The switch is controlled so that the driver circuit only  
receives the voltage when the write line is to have write current through it as  
10 determined by a decoder responsive to an address. The driver is affirmatively  
disabled when the write line is intended to not have current passing through  
it. As an enhancement to overcome ground bounce due to high currents, the  
input to the driver can be capacitively coupled to the ground terminal that  
experiences such bounce. Additional enhancements provide benefits in  
15 amplitude and edge rate control.